Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

COPYRIGHT, 1937, NATIONAL FIRE PROTECTION ASSOCIATION

Volume 4, Number 4 | BOSTON, MASSACHUSETTS | April, 1937

Flames shooting up the front of the building as the result of an oil heater explosion in the post office, confronted the volunteer firemen of Wenham, Mass., on the morning of February 20. The picture shows the condition of the fire before the firemen arrived. On the sidewalk is a fire extinguisher used by the occupants while awaiting help.

What the First Firemen See

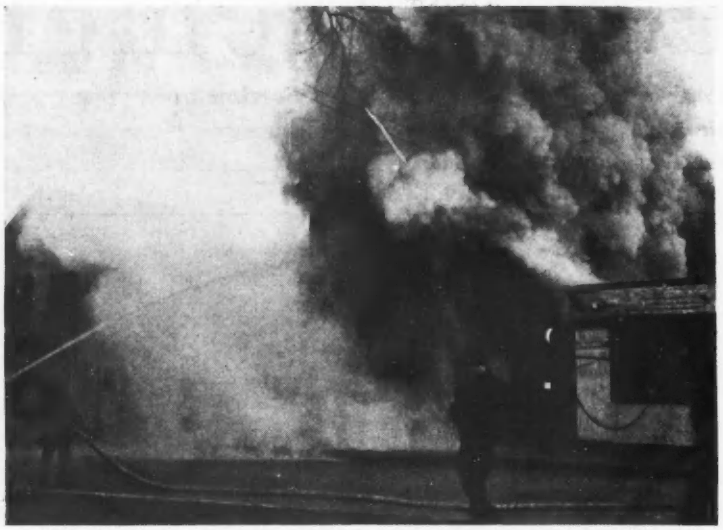
The Fire May Look Tough on Arrival But Trained Volunteers Know It Can Be Brought under Control with the Right Attack

By Harold S. Walker

SELDOM is a photographer available at the start of a fire to record the early stages and show conditions as they are when the fire fighters arrive. It is often hard for persons arriving late on the scene to visualize the conditions which confronted the firemen and to therefore appreciate when a really good "stop" has been made. The fire pictured here also shows the value of firemen's training. The volunteer firemen which effectively controlled this fire were not baffled by the flames and dense smoke. Due to training at a zone firemen's training school, they went to work with efficiency and dispatch.

The fire shown occurred shortly after 7 o'clock on the morning of February 20, in one of a group of closely built wooden structures on the main street of the town of Wenham, Mass. The town, which has a population of about 1100 persons, has a volunteer fire company of twenty men.

The blaze started from an oil heater explosion in the post office on the first floor of a wooden frame store building having an apartment above. Five occupants of the apartment, including several children, narrowly escaped death in the fast-spreading flames.



Volunteer firemen are shown knocking down the fire on the outside of the Wenham post office with the first dash of water from the big line, preparatory to attacking the fire at close range. With no hydrants available this stream was supplied by a pumper located at a cistern 400 feet distant.

Three men were in the post office when the fire started. Two of them attempted to fight the fire with chemical extinguishers but were quickly driven outside by the flames. The other man ran to the nearby fire station to sound an alarm.

When the volunteer firemen arrived flames were shooting up the entire front of the building and had ignited the under side of the eaves. The fire was also spreading through the inside of the building. A chemical line was put immediately into operation. As no hydrants were available the engine was set at a cistern in front of the town hall about 400 feet away. Within eight minutes after the start of the fire the firemen had a water stream on the blaze. A few minutes later volunteer firemen from the town of Hamilton arrived and ran a line from another cistern.

In spite of the headway of the fire when the fire department arrived, it was largely confined to the first floor of the one building. Although there was some fire damage upstairs, the second floor tenants were able to occupy their apartment after the fire.

△ △ △ △ △

Clean-Up Campaigns for Civic Improvement

A CLEAN-UP Campaign in the Spring performs about the same function as Fire Prevention Week does in the Fall. In addition to promoting fire prevention, it also promotes health, sanitation, and accident safety by getting rid of the winter's rubbish and other needless accumulations of combustibles. Because such a campaign does so much for the well-being of a community, fire departments find that it isn't a hard job to convince local organizations and public spirited individuals that one week in the Spring should be devoted to this work.

There is a lot of truth in the clean-up slogans "A Clean House Seldom Burns" and "A Bit of Caution Saves a Fortune."

The organization of a Clean-Up Campaign is described in a new pamphlet prepared by the National Fire Protection Association Committee on Fire Prevention and Clean-Up Campaign. This has been mailed to all fire departments which are members of the Volunteer Firemen's Section. Attractive posters and other literature for use in the campaign are also available from the N.F.P.A. Publicity material for use in local newspapers may be obtained by writing to the National Clean-Up and Paint-Up Campaign Bureau, 2201 New York Ave., N.W., Washington, D. C.

△ △ △ △ △

New Film "Sounding The Alarm" Available

OVER 11,000,000 people have seen the popular motion picture "The Bad Master" produced by the Automobile Insurance Company and the Standard Fire Insurance Company of Hartford, Connecticut. These companies have just produced a new educational film entitled "Sounding the Alarm". The first film showed the common causes of fires in homes and the steps that can be taken to prevent them. The second film teaches what should be done at the first sign of fire and a lesson about false alarms. This new sound film is available in 16 mm. and 35 mm. sizes for showing in theatres, schools, clubs, and civic auditoriums. Fire departments desiring to borrow the film as a part of their educational work should write to either of the two companies named above, at Hartford, Connecticut.

After the smoke cleared away the Wenham post office is still standing and the second floor is habitable. Fire retardant roofing on both the damaged building and nearby wooden structures prevented sparks from igniting the roofs.

Our Magazine Certainly Gets Around

WE GOT a kick on the story of the Ohio Valley fires and floods which appeared in last month's issue. Assistant Chief Stanley Williams, of Wilkes-Barre, Pennsylvania, writes, "This journal has been read by all the men in the department and every man who read it noticed that you didn't mention the City of Wilkes-Barre which went to Louisville the same time as the Harrisburg, Lancaster, Reading, Erie, Chester and Wayne departments." It seems that there were eight men who went to Louisville with Chief Williams, and what leaves us without a leg to stand on is the newspaper picture we published of the Louisville fire in which ten persons lost their lives. Chief Williams is able to point to himself in that picture, right in the thick of things, with the walls falling around him.

The story was written while fire emergencies due to the floods had everybody on whom we had to depend for information still pretty busy. Wilkes-Barre's is by no means the only fire department which did valiant service during the floods, but whose name does not appear in any reports. Many performed valuable services which probably will never be known outside of their own communities.

We can ask that the error be excused, but we'll probably never get over the vision it gives us of thousands of firemen, like those in Wilkes-Barre, reading each issue with an eagle eye. In a way, however, we are glad this happened, as it shows how this magazine certainly gets around.

△ △ △ △ △

Discussion Subjects

CHIEFS and officers of fire departments from all parts of the country have written that they were finding this question and answer section of VOLUNTEER FIREMEN very valuable to them at their regular meetings or training classes. Only questions of practical interest to firemen are asked. Material for answering the questions is carefully prepared from the best practices of fire departments throughout the country and from standards and regulations drawn up by technical committees of the National Fire Protection Association.

Acme

A spectacular fire in a truckload of grain on a California highway. The truck and contents were destroyed in the intense fire before aid could be summoned. About all the driver could do was detach the accompanying trailer, which saved half his load.

57

Q. Would there be advantages in having a system of signals for use between the pipeman and pump operator?

A. Such a system of signals frequently may be valuable at fires to speed up operations of getting water after the line is in position. Verbal signals are often ineffective at fires because of noises. A simple but effective system of signals covering the most important orders sent to the pump operator by the pipeman or company officer is described and illustrated on pages 6 and 7.

58

Q. Discuss plans for reducing the number of grass and brush fires this spring.

A. Plans are being made in many fire departments for carrying out one or more of the following measures to reduce the number or seriousness of grass and brush fires: (a) the burning or clearing of vacant lots, (b) requiring permits for the burning of rubbish or brush by private individuals and issuing permits only on days when weather conditions make such fires safe, (c) patrols of parts of the town or wooded areas where grass and brush fires are frequent, and (d) putting in order the pump tanks, 1½-in. hose and other special equipment used in these spring fires.

In hundreds of cities and towns about half the number of runs each year are for these trivial and easily preventable fires. The records of two small Arkansas towns are typical. In Morrilton last year, 30 of the department's 60 alarms were for grass fires. Such alarms also headed the list with 44 out of 121 alarms in Stuttgart.

Usually these grass fires don't result in large property losses but they do cause wear and tear on fire apparatus and make a lot of trouble for the firemen. Every fire chief knows from experience just about how many grass fires he can expect this year and just about where they will be. Page 4 tells how one fire chief is controlling his grass fire problem from the sky.

Problem Questions FOR APRIL

Suggested for discussion at company and department meetings this month

59

What are the effective ranges of good fire streams from the various sizes of nozzles and pressures commonly used by fire departments?

60

What are the dangers of "water hammer" in a hose line and how can it be prevented?

Watch for the answers in the next issue of VOLUNTEER FIREMEN

Fighting Fires from the Sky

This Resourceful Fire Chief Maps Roads, Paths and Water Sources for Woods and Rural Fires and at Times Directs Fires from the Air

FIGHTING fires from the sky is not just a dream. Most firemen "fly" through the streets to fires, but here is a fireman who literally takes to the air when the alarm rings. Chief Charles K. Endicott of the fire department of the town of Canton, Massachusetts, has made the airplane an important ally, especially in fighting the fires in wooded and grassy areas which are the concern of almost every fire department at this season of the year.

The town of Canton covers a large area, much of which is woodland and brush-covered land subject to fires in the Spring and Fall. At one side of the town is a valley about five miles long which is close to the built-up portion of the town. Several times the prevailing winds have carried fires down this valley and endangered the built-up area.

Such a fire occurred last Spring. The fire covered a large area and the smoke was so dense that firemen could not tell which road to take to head off the flames. The Chief hurried to the airport and jumped into a plane. From aloft it was clear exactly how far the fire had traveled. By hand signals the fire apparatus was directed ahead of the fire which was controlled without damage to buildings. The Chief is now considering the installation of a two-way radio system on a piece of apparatus and in a plane to facilitate the giving of orders from the air.

Moreover, Chief Endicott does not wait until the bell hits to make use of the airplane. He has gone aloft between fires and made a photographic map of the town. Numerous small shots taken from the air were trimmed and fitted together to make a complete map. As shown by a small section of the map reproduced on the opposite page, this map shows things important to firemen which no other type of map would show as well.

THE photographs, studied closely, show obscure woodland paths the knowledge of which is indispensable to firemen in getting their equipment in to fight fires. They show small water holes and streams which can serve as sources of water supply for portable forest fire pumps. Chief Endicott states that since having the air map they have learned of water sources which they formerly did not know existed. Near the scene of one fire which occurred before the map was made and which required the laying of several thousand feet of hose, the map revealed a small pond which would have provided adequate water. In addition, the map shows drainage ditches which may serve both as fire breaks and water sources. Clearings along power lines and other openings which would serve to check woods or brush fires are revealed.

The protection of buildings may also be improved by information obtained from the airplane map. Water sources which might be made to supply water holes providing pumper suction near isolated groups of buildings not having hydrant protection may be readily located. Even in closely built areas, airplane pictures are of value to aid fire departments in spotting target hazards and planning for their protection.

Some folks might think that the use of airplanes is too expensive for most fire departments, but this is not true the way that it is done at Canton. It is clearly a mutual aid proposition. The airport receives its pay in the form of special fire protection. When an air meet is held at the airport the firemen turn out and stand by with a fire truck, insuring instant service should a mishap occur. In return the airport is glad to make an airplane available to the fire department on the occasions when one can be of special service.

Many fire departments would find an airplane map of their community of great value. The easiest and most certain way to obtain a first-class map of this type would be to engage one of the concerns in the business of supplying such maps. As such a map covering a large area might prove too expensive to be included in the budgets of many volunteer fire departments, Chief Endicott gives the following suggestions as to how reasonably good results may be obtained by amateur air photographers.

The flight should be planned in advance on a map which the airplane pilot can follow. Flying must be in straight lines. Pictures must be taken in a logical order so that the prints can be fitted together side by side. The area to be covered by each strip of pictures must be laid out in advance. Pictures should be all taken at the same altitude so that they will all be of the same scale when the map is pieced together. While professional air photographers often take pictures at altitudes of 10,000 feet it is suggested that, to secure without air cameras the details that firemen will want, pictures should be taken at about 5000 feet. The pictures should be taken on a clear day and while the sun is high in the sky. The camera should be pointed straight down so as not to make an oblique view. The pictures should generously overlap so that they may be cut and joined inconspicuously along natural lines such as roads.

THE airplane may be a spectacular and useful new tool which can be brought to bear on the problem of grass and woods fires. However, most fire departments just now are getting set for the epidemic of runs to outdoor fires which always occurs in the spring.

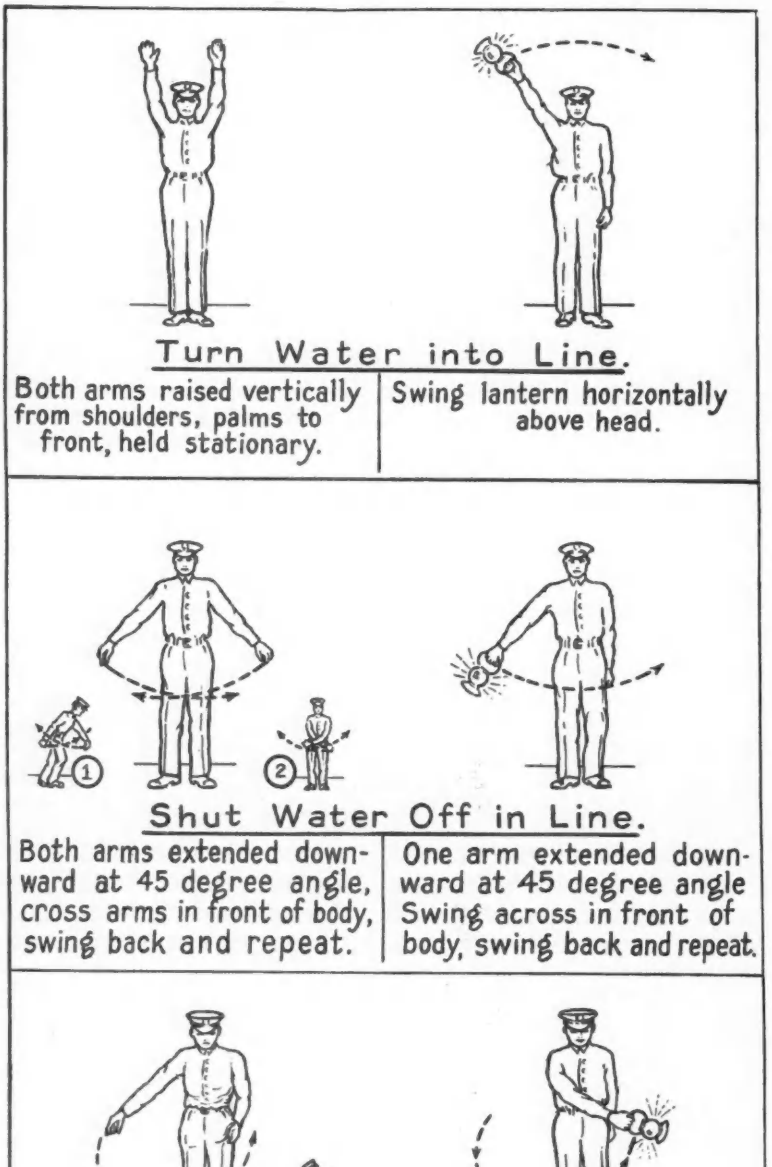
The getting set process includes a check-up of the pump tanks and other special equipment for outdoor fires. Proper equipment is essential for grass and woods as with other fire operations. It is impossible for men equipped only with brooms and spades to stop a brush fire as fast as men equipped with proper pump tank extinguishers and other modern apparatus. For work in the woods, portable pumps with plenty of hose are also necessary.

One of the most effective measures for reducing the number of needless runs to grass and brush fires is that of a grass fire patrol on those days when a lot of runs may be anticipated. This patrol is made up of one or two men in a car equipped with brooms and pump tanks. These patrolmen can catch many outdoor fires when small, and they can warn persons who have too large fires for burning trash or grass, or who are burning without a permit from the department or on days which are too dry for fires to be safe. In warning about these matters the fire department patrols are doing a highly effective job of public education.

Many points of interest to the fire department can be shown on a map made from an airplane photograph. Highways and woodland paths show up in white. A power line clearing shows as a firebreak. Ponds and streams show up clearly in black. Even drainage ditches appear, which enables the map to be used in selecting locations for water holes and other sources for pumper suction. The picture is a small section of the map made by Fire Chief Charles K. Endicott of Canton, Massachusetts.

Calling for Water!

System of Signals between Pipemen and Pump Operator Speeds Up Turning Water On and Off and Raising and Lowering Pressures


Turn Water into Line.
Both arms raised vertically from shoulders, palms to front, held stationary.
Swing lantern horizontally above head.
Shut Water Off in Line.
Both arms extended downward at 45 degree angle, cross arms in front of body, swing back and repeat.
One arm extended downward at 45 degree angle Swing across in front of body, swing back and repeat.
Pick Up
Describe circle with one arm - in front of body.
Describe circles with lantern in front of body.

THE difficulties of promptly getting water after the line is in position are known to every fireman. No matter how quickly a line is stretched to an advantageous position there is an inevitable delay while a man is going back to call for water. Such delays are increased by noises on the fire grounds. The roar of motors and the sirens of approaching apparatus often make verbal signals indistinguishable if not inaudible even at short distances.

Such difficulties in sending messages to the pump operator are largely overcome by a simple system of signals. One such adopted by the Pasadena, California, Fire Department is shown in the drawings. The signals are given by arm movements in the daytime and by a lantern at night. They cover all of the most important orders which are usually sent to the pump operator by the company officer. How easy these are to make can be seen by trying them out a few times. They are easily understood, as the signal in each case itself suggests the action. Note the signal for "Pick Up" for the best example of this.

The most important of all signals is obviously the call for water. This signal is given by raising both hands over the head with palms forward and it is readily visible even if a crowd has gathered on the fire grounds. At night the signal is given by swinging a lantern horizontally above the head as shown in the diagrams.

When the time comes to shut the water off in the line the signal is given by extending both arms downward at a 45 degree angle and then crossing the arms several times in front of the body. At night a lantern is swung across in front of the body from a 45 degree angle at one side to a 45 degree angle at the other side.

If the fire is out the signal to pick up is given by making several large circles with one arm in front of the body just as though something was being picked up. The same signal is given at night with a lantern. When this signal is received the hydrant should be shut off, the pump disconnected, the hose rolled up and the operator then awaits orders to return to quarters.

In addition to obtaining water at the

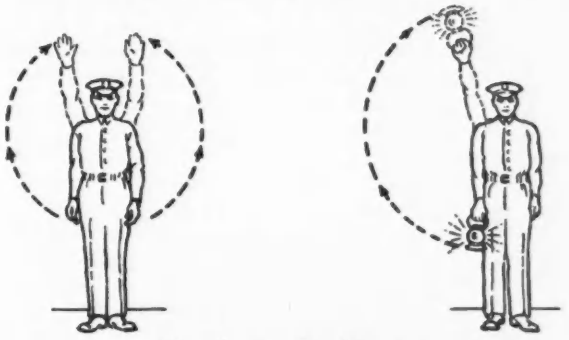
start of the fire and shutting down the line when the fire is out, it is frequently necessary to give the pump operator orders regarding changes of pressure. When the fire has been knocked down for example, engine pressure is usually no longer needed and the signal for hydrant pressure is given by swinging the arms from the side upward over the head. At night the same command is given by swinging the lantern upward with one arm in the same manner. This same signal would also be useful at the start of the fire if it is known that hydrant pressure will be sufficient.

IT IS a rule in fire fighting that the pump operator must be told the location at which the line is to be operated and the amount of hose used so that he may give the proper pressure. However it frequently happens that the line of hose is shifted to an upper floor or for some other reason an increase of from ten to fifteen pounds pressure is desired. This is obtained by extending both arms horizontally and swinging them up to a 45 degree angle several times. At night a lantern is swung upward to a 45 degree angle with one arm.

Sometimes it is found that pressure on a line is too great for easy handling or is causing the stream to break. At other times it is desirable to lower the pressure while a line is being shifted to another position. The signal for reducing pressure from 10 to 15 pounds is the opposite of that for raising pressure. The arms are swung downward to a 45 degree angle from a horizontal position instead of upward.

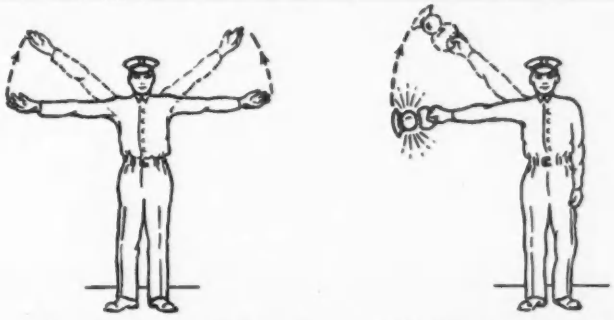
It may be considered desirable in some departments to develop signals for other messages. For example, a call for small hose could be given by holding up one hand. In every case however, it is essential that signals be understood by all members. Also signals made in a careless fashion are liable to be misunderstood and are worse than no signals at all. The operator should return each signal to show that it is understood. If more than one line is in use the signal must be given so it is clear which line the signal is intended to cover. However the great majority of fires are extinguished without the use of more than one large hose stream.

A system of signals might also add to the efficient appearance of any department which takes pride in its drill work.



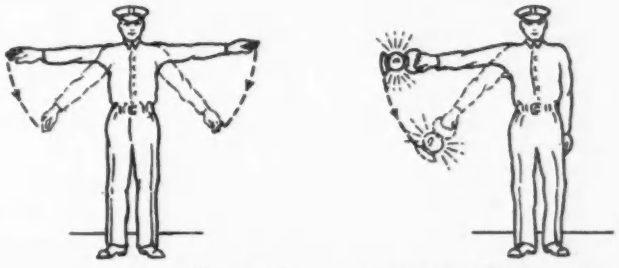
Hydrant Pressure

Swing both arms from sides vertically over head.	Swing lantern from side vertically over head.



Increase Pressure 10 to 15 Pounds

Extend arms horizontally, palms up, swing arms up to 45 degree angle. Swing back and repeat.	One hand extended horizontally with lantern. Swing up to 45 degree angle. Swing back and repeat.



Lower Pressure 10 to 15 Pounds

Extend arms horizontally, palms down, Swing arms down to 45 degree angle. Swing back and repeat.	One hand extended horizontally with lantern. Swing down to 45 degree angle. Swing back and repeat.

The National Fire Protection Association

The Clearing House for Authoritative Fire Protection Information Since 1896—The Background From Which It Serves Volunteer Firemen

THE National Fire Protection Association was organized in 1896 by a group of men interested in reducing the fire losses throughout the United States and Canada. From its small beginning forty-one years ago the Association has gradually grown to the point where it has nearly three thousand five hundred members in all parts of the world. In addition its Volunteer Firemen's Section numbers over eleven thousand affiliated individuals. The Association never has become commercial in character and has steadfastly followed its objective of doing everything in its power to reduce loss of life and property from fire.

Membership in the Association has never been restricted, and any individual or concern interested in any phase of the reduction of the fire loss and fire fighting is elegible to membership.

In October, 1933, it organized the Volunteer Firemen's Section in the interest of the thousands of volunteers throughout the country. There is no other organization that is similar in character throughout the world. The Association has become the clearing house for all that is authoritative on the subject of the fire waste, fire protection and fire prevention.

Technical Standards

The technical standards developed by the Association are widely used as the basis of state, provincial and municipal legislation, as insurance requirements and as a guide by property owners. There are some 40 current technical committees of the Association. The variety and importance of the subjects covered is shown by their titles, which are:

Automatic Sprinklers; Aviation; Blower Systems; Building Code Requirements for Fire Extinguishing Equipment; Building Construction; City Planning and Zoning; Construction Operations; Dust Explosion Hazards; Electrical; Electrical Field Service; Electric Railway Car Houses and Cars; Farm Fire Protection; Field Practice; Fire Prevention and Clean-up Campaign; Fireproofing and Preservative Treatments; Fire Pumps; Fire Record; Flammable Liquids; Forest; Fumigation Hazards; Garages; Gases; Hazardous Chemicals and Explosives; Hydrants, Valves and Pipe Fittings; Laws and Ordinances; Manufacturing Hazards; Piers and Wharves; Protection Against Lightning; Protection of Openings in Walls and Partitions; Protection of Records; Public Information; Public Water Supplies for Private Fire Protection; Pyrotechnics; Safety to Life; Salvaging Operations; Signaling Systems and Thermostats; Small Hose Couplings; Spontaneous Heating and Ignition; Static Electricity; Storage of Combustible Fibres; Tanks; Truck Transportation; and Visual Education.

The work of the preparation of standards and the revision of existing standards goes on unceasingly so that the standards are in step with progress in science and invention. There is no public effort in the history of the nation to which there has been so freely given over so long a period so much thought and painstaking technical investigation as the National Fire Protection Association.

> ***Statement of Objects***
>
> **of the National Fire Protection Association as expressed in its Articles of Association:**
>
> *"To promote the science and improve the methods of fire protection and prevention; to obtain and circulate information on these subjects and to secure the co-operation of its members in establishing proper safeguards against loss of life and property by fire."*

Education—Publicity

Aside from its technical work, the Association devotes a large proportion of its time and effort to the education of the general public in the prevention of the fire waste. Literature distributed by the Executive Office of the Association is prepared with the object of educating people generally in fire prevention. It is put into popular form so that anyone, whether familiar with the subject or not, is able to educate himself, protect his own property, and give advice to his neighbor. The International Fire Prevention Week campaign conducted throughout the United States and Canada every fall has been sponsored and promoted by the National Fire Protection Association. The Association meets annually in a four-days' convention, at which the members have an opportunity to discuss the latest developments in fire protection and prevention.

The Association issues a QUARTERLY MAGAZINE which is unique in providing special articles on fire hazards, fire protection and fire prevention. The Association maintains a Fire Record Department, and the information developed in this department is printed in the magazine, providing an indispensable amount of information for those who are interested in fire causes and fire prevention. All important fires that occur throughout the world, with special references to their origin, extent and manner of extinguishment, are described in the QUARTERLY MAGAZINE. The Association issues a monthly news bulletin to its members, giving current items of interest on any developments in the field so that the members are constantly kept up to date on these activities. Bulletins on various fire hazards and special posters are issued from time to time for general public distribution.

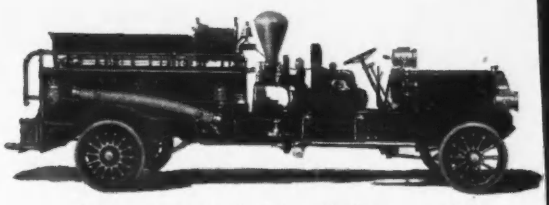
All these publications are issued to volunteer fire companies that are members of the Volunteer Firemen's Section, and in addition each fireman affiliated receives VOLUNTEER FIREMEN, the monthly journal of the section.

Membership

Membership is open to any individual or organization interested upon payment of the annual dues which are ten dollars. For fire departments or companies taking out a membership in the Volunteer Firemen's Section the dues allow up to twenty men to enroll. (Add fifty cents for each man in excess of twenty.) Sample copies of the literature issued or information on the work of the Association will gladly be sent to anyone interested. Headquarters of the Association are at 60 Batterymarch Street, Boston, Mass.

Mack

The sensation of the year—Mack Type 75. 750-gallon pumper. Modern in performance as in construction.



A pioneer in fire engineering—Mack pumper of 1911.

For 26 Years MACK has set the pace in FIRE ENGINEERING

EVER since 1911, when the first Mack pumper was built, Mack has set the standards for modern fire engineering. The reason? Mack has facilities to build the finest in fire apparatus—and does!

A Mack purchased today will measure up to the standards of years to come—it has the built-in stamina to answer the bell year after year with unfailing dependability.

When repairs do become necessary Mack is "on call" with the most complete service facilities in the fire apparatus field. There is a Mack direct factory branch near you—one of 76 strategically located throughout the nation.

No matter how big your requirements, or how small your budget, you can get a Mack that will give the utmost in reliable, low cost fire protection!

MACK TRUCKS, INC., FIRE ENGINE DIVISION, NEW YORK, N. Y.

1 GALLON—DUPLEX PUMP
"CAPTAIN"- FYR-FYTER
AN IDEAL EXTINGUISHER FOR VOLUNTEER FIRE DEPARTMENTS

Here is the equivalent of four 1-quart extinguishers built into one thus making this large quantity of vaporizing liquid available without running for another extinguisher when more than the average size blaze is encountered. This is but one of the complete line of Fyr-Fyter Extinguishers each of which have exclusive merits which stamp them as superior.

DEALERS WANTED
If you are interested in adding to your income by spare time work or in building a permanent business for yourself without investment in stock, fixtures, etc., write for our new Dealer's Plan to

FYR-FYTER COMPANY
Dept. 20-16 DAYTON, OHIO

Shuredry SALVAGE COVERS

Reduce WATER DAMAGE and INSURANCE RATES

Three-fourths of all fire losses are directly chargeable to water damage. Reduce this hazard and better your record. Specify Shuredry Salvage Covers. Drill your men in their use. In every city where Shuredry Salvage covers are a part of regular equipment taxpayers have benefited.

Write our nearest plant for information and prices.

Fulton Bag & Cotton Mills
Manufacturers Since 1870
ATLANTA ST. LOUIS DALLAS
MINNEAPOLIS BROOKLYN NEW ORLEANS KANSAS CITY

Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

Published by the National Fire Protection Association, a voluntary non-profit organization, 60 Batterymarch Street, Boston, Massachusetts, U.S.A. Franklin H. Wentworth, Managing Director. Percy Bugbee, Assistant Managing Director. Horatio Bond, Managing Editor.

Volume 4 **April, 1937** Number 4

41st Annual Meeting The annual meeting of the N.F.P.A. will be held this year May 10 to 14, at the Congress Hotel, Chicago, Ill. Any reader of VOLUNTEER FIREMEN who can attend will be welcome and will find the meeting worth his while. One entire session will be devoted to matters of primary interest to volunteer fire departments.

Discussions will be led by prominent fire department authorities and engineers of industrial and insurance organizations. Some thirty technical committees of the association will report, and topics cover a wide range of subjects. Of special interest to volunteer fire departments will be such matters as small hose couplings, rural fire apparatus, farm building construction, the hazards of butane and other liquefied petroleum gases, and regulation of automobile trailers. There will be a meeting of the Fire Marshals Section which will be of especial interest to all fire department officers and men. Underwriters' Laboratories, Inc., the great national fire testing laboratory, is located in Chicago and is staging an elaborate program of demonstrations for the benefit of those who attend.

A program of the meeting will be mailed to members with the April News-Letter which member departments receive at fire headquarters. There will also be a card listing the 22 committee reports which are printed in advance of this meeting. We hope other readers who can attend will write for a personal copy of the program and this card. The card can be used to order copies of any one or all of the committee reports, which are free. We also hope that the reports will be studied and that those coming will be prepared to contribute to the discussion on them.

A committee of Chicago members are making arrangements, with the Chicago Fire Department and Illinois State Fire Marshal's Office among the hosts. Mark the dates, May 10 to 14, on your calendar.

11,000 Firemen Since the last issue, membership in the Volunteer Firemen's Section has reached a new high. A gradual growth in three and one-half years to over 11,000 members is a remarkable record. Each member can justly be proud that he is a part of this great international organization for firemen.

Within the past month, the following 16 new departments or companies with 334 men have joined for the first time, and 43 departments or companies with 950 men have renewed their memberships. This brings the total membership to 11,021 men.

Vernon Fire Department, Vernon, British Columbia.

The Richardson Company, Melrose Park, Illinois.

Fairfield Fire Department, Fairfield, Iowa.

Columbia Heights Volunteer Fire Department, Columbia Heights, Minnesota.

Cut Bank Volunteer Fire Department, Cut Bank, Montana.

Ho-Ho-Kus Fire Department, Ho-Ho-Kus, New Jersey.

Long Branch Fire Department, Long Branch, New Jersey.

Towaco Volunteer Fire Department, Towaco, New Jersey.

Roxbury Chemical Company No. 3, Wharton, New Jersey.

Gallup Volunteer Fire Department, Gallup, New Mexico.

Riverside Hose Company No. 4, Tarrytown, New York.

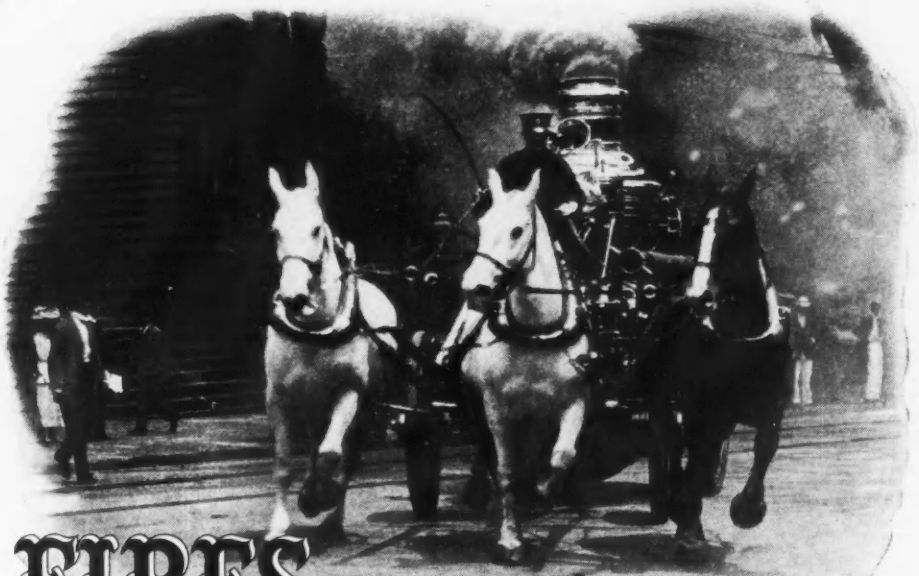
Kirtland Volunteer Fire Department, Willoughby, Kirtland, Ohio.

Stillwater Fire Department, Stillwater, Oklahoma.

Nipigon Fire Brigade, Nipigon, Ontario.

Coquille Fire Department, Coquille, Oregon.

Big Stone Gap Fire Department, Big Stone Gap, Virginia.



FIRES were worth running to — in those days!

A GOOD stiff breeze to carry sparks from roof to roof, and a whole row of houses was likely to go up in flames. You bet fires were worth running to in those days.

The menace of fire has long been one of man's worst enemies. And for sixty years, Johns-Manville has been at work to *control* this menace.

Early it was discovered that two of the most likely and dangerous sources of fire were the roof and sidewalls of all types of structures. So, through constant research, Johns-Manville has developed products which have saved millions of dollars worth of property and, oftentimes, life itself.

* * *

In the constant search for better materials, Johns-Manville Research Engineers also recognized the great economic waste involved in roofing and siding materials that wear out. So, for years, Johns-Manville Engineers looked for ways to produce materials that would resist time as well as fire—materials that would be durable and even everlasting.

Hence today, thousands of home owners and plant managers are benefiting from the economy and the safety which Johns-Manville Asbestos Roofing and Siding Materials provide.

JOHNS-MANVILLE JM

BUILT-UP ROOFS of J-M Asbestos Felts last 20, 25, 35 years, and longer. They are fireproof. The hot sun won't crack them; rain, sleet and snow won't make them leak.

J-M ASBESTOS SHINGLES last a lifetime. Unburnable; won't rot, split or wear out. J-M Cedargrain Asbestos Shingles for sidewalls are equally fireproof, permanent.

J-M CORRUGATED TRANSITE ROOFS AND SIDEWALLS are highly resistant to the attack of fumes, gases, all kinds of weather. Can't burn; rust or rot; never need paint.

WEATHER, WIND AID FOREST FIRE FIGHT
Gales Subside, Fog Settles Over Oreg Timberlan
20,000 FIGHT FIRES IN NORTHERN WOODS
Wisconsi Killed
DIE AS FOREST FIRES BURN TOWN
Thousands Battle Blaze Over Big Area Around Border of Oregon, California.
3 TOWNS IN WAY OF FOREST FIRE
50,000 Battle Flames Raging in North Woods; Isle Royale in Peril

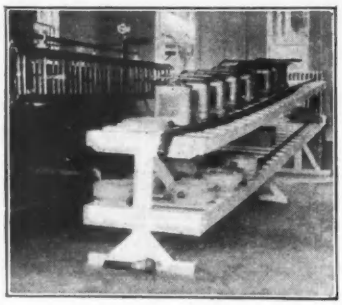
Stop FIRE WASTE!

with Famous INDIAN FIRE PUMPS

The Outfit Widely Used by Foresters and Fire Departments

TO quench any type of fire quickly and completely, the world famous INDIAN FIRE PUMP is the outfit that has the enthusiastic endorsement of professional Fire Fighters. (At right are shown nine INDIANS at Long Lake, N. Y. fire department.)

That's why you will see INDIANS in abundance on forestry patrol trucks, in CCC Camps, in rural and city fire departments and in camps and cottages far removed from the usual agencies of fire protection.



Solid metal tanks, curved in shape, can be kept filled ready for any emergency without danger of puncturing or leaking. Clear water only is required—no chemicals. Handle permits carrying by hand or outfit can be slung over shoulders. Ventilated tank prevents moisture and cold from the water coming in contact with wearer's back.

Investigate the many advantages of the INDIAN today. Send for our illustrated booklet explaining why this is the fire prevention equipment YOU NEED.

COMBINATION BRASS NOZZLE RIDE 50-FOOT STREAM OR A STRONG COARSE SPRAY.
NOZZLES CHAINED TO PUMP AND CANNOT BECOME LOST
HEAVY BRASS, QUICK OPENING WATER TIGHT FILLER CAP WITH REMOVABLE BRASS STRAINER CAP HAS INSIDE CHAIN TO PREVENT LOSING.
COMBINATION BRASS HANDLE FOR CARRYING TANK AND FOR HOLDING PUMP
EXTRA HEAVY TANK HAS SOLID BRASS BOTTOM. ALL JOINTS LOCKED AND SOLDERED. BUILT STRONG
PATENTED
FORM-FITTING, VENTILATED TANK GIVES A CONSTANT CIRCULATION OF AIR BETWEEN TANK AND CARRIER'S BACK. IT PROTECTS THE BACK FROM THE COLD WATER AND MOISTURE IN THE TANK AND KEEPS THE BACK WARM AND DRY. THE FORM-FITTING SHAPE OF THIS TANK FITS THE BACK PERFECTLY. SNUG AND FIRM AND FEELS GOOD.

Features of the Indian

Strong metal tank stands alone — no propping to fill. Will not rot or puncture. Solid brass pump will not get out of order or cause trouble. Throws 50 ft. strong stream. Heavy solid brass bottom on galvanized tanks. Brass carrying handles. Carrying rack, available for use on trucks.

Write for Catalog with Testimonials from Users

D. B. SMITH & CO. **416 Main St., Utica, New York**

PACIFIC COAST AGENTS:
Hercules Equipment & Rubber Co., 550 Third Street, San Francisco, Calif. Western Loggers' Machinery Co., 302 SW. 4th Street, Portland, Ore.
Pacific Marine Supply Co., 1217 Western Avenue, Seattle, Wash.

SAFE Electrical Cords
CARRY THIS LABEL
UNDERWRITERS LABORATORIES INSP. CORD

Fighting for the use of safe electrical equipment is another way of fighting fires. See to it that your townsmen buy cords which have been approved and labeled by Underwriters' Laboratories, Inc.

ELECTRICAL CORD MANUFACTURERS
155 EAST 44th ST., NEW YORK, N. Y.

NEW CATALOGUES

This department is for the convenience of readers who wish to be advised of new products or services in the fire field. When writing for catalogues please mention VOLUNTEER FIREMEN.

Akron Brass Manufacturing Company, Inc., Wooster, Ohio. "Brass Goods for Fire and Mill Equipment", Catalog No. 635, 92 pages. Hose couplings, nozzles, and other equipment and tools used by fire departments.

American Steam Pump Company, Battle Creek, Mich. Bulletin No. 75 (Edition No. 4). Data on Barton pumps and fire streams.

Federal Electric Company, 8717 South State St., Chicago, Ill., Bulletins Nos. 55 and 56. Complete details of Federal sirens.

The Fog Nozzle Company, 1520 East Slauson Ave., Los Angeles, Calif. "How to Use Fog Nozzles," 16 pages. Description of types of fog nozzles and their uses.

Gamewell Company, Newton Upper Falls, Mass. "Vitaguard", a manual, 40 pages. A complete description of the Vitaguard fire alarm system for volunteer fire departments and industrial plants.

Goulds Pumps, Inc., Seneca Falls, N. Y. "Goulds 'Close Cupld' Pumps", Bulletin No. 208, 12 pages. Centrifugal pumps for industrial uses.

Hartford Accident and Indemnity Company, Hartford, Conn. "Volunteer Firemen's Accident Insurance", leaflet No. 77538. Description of policies available.

Protectoseal Company, 1906 South Western Ave., Chicago, Ill. "Protectoseal Products", Catalogue No. 6, 24 pages. Safety cans and other equipment for storing and dispensing hazardous liquids.

Quaker City Rubber Company, Comly and Milnor Sts., Philadelphia, Pa. "Mechanical Rubber Goods", Catalogue No. 34, 46 pages. Includes fire hose and couplings.

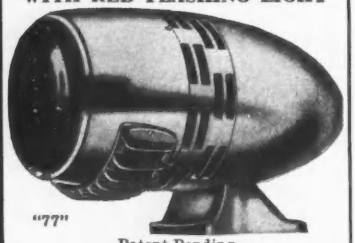
D. B. Smith and Company, Smith Building, Utica, New York. "Indian Fire Pump", Catalogue, 8 pages. Showing full line of Indian fire pumps, supply tank, carrying rack, repair parts, and pump tank extinguisher.

Waterous Company, Saint Paul, Minn. "Waterous Rotary Fire Pumps and Hydrants", two circulars, 10 pages. Description of this brand of pumps and hydrants, with illustrations.

Specify

FEDERAL "77"

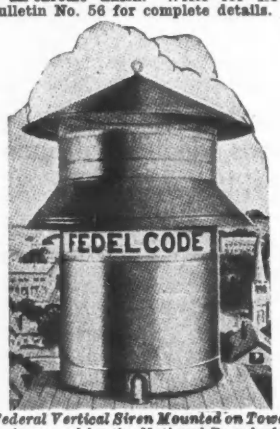
DOUBLETONE,
LONG ROLL SIREN
WITH RED FLASHING LIGHT



"77"

Patent Pending

Here is a siren with two distinct tones—a high, piercing tone to penetrate closed cars with a shriek for instant action—and a low, carrying tone that clears traffic for blocks ahead. To add to the carrying power, the frequencies of the two tones cross at regular intervals to produce an extra weighted beat that rolls ahead like the third wave at the seashore. You get two tones and triple power! And combined with this are the features of our famous C-5 Coaster Siren—the brilliant red or green flashing light beam, enabling traffic to both SEE and HEAR your warning—long roll of more than TWO MINUTES after current is shut off—grease sealed ball bearing motor —all-chrome finish. Write for New Bulletin No. 56 for complete details.



Federal Vertical Siren Mounted on Tower.
Approved by the National Board of Fire Underwriters.

Federal VERTICAL Sirens are most practical because

(1) They distribute sound in a wide range in all directions.
(2) Rugged in construction to withstand all kinds of abuse.
(3) Entirely weatherproof housing finished in Red Duco withstands sleet, rain, hail and dust storms.
(4) They are equipped with special high speed, ball bearing Federal Siren motors.

Write for Bulletin No. 55 for complete details.

FEDERAL ELECTRIC CO.
8717 So. State St. Chicago, Ill.

$10.00 Prize Can Be Yours

Enter Your Experience with Extinguishers For Award in Pyrene Prize Letter Contest

EXPERIENCES where firemen used fire extinguishers to save an automobile and expensive electrical equipment are told by the winners of the cash prizes this month. Every fireman has had, or knows of, similar experiences. Why not write one of them down and send it in for consideration in this contest sponsored each month cooperatively by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN. Your letter may win some real money.

FIRST PRIZE — $10.00

K. W. BELL, *Driver,*
Fire Department, Milo, Maine.

Fireman Fools Two Fools

"Driving along a highway about two o'clock one morning last summer, I came upon a car on one side of the road which seemed to be on fire. Just as I approached, two men ran from the car. Smoke was pouring from the windows and cracks around the doors.

"Because of the men running away, I hesitated for a moment, not knowing exactly what to do. I took my 1-quart carbon tetrachloride extinguisher which I always carry in my car and ran to the car on fire. Opening the door, I found the fire on the floor near the front seat. I extinguished the fire which I found to be oily rags with evidence of burned paper.

"I looked for registration plates, but apparently they had been removed. I will always feel that this fire would have been reported as having started from a short circuit or by backfiring if I hadn't come along with my extinguisher to fool the fools and prevent a claim on the insurance company."

SECOND PRIZE — $3.00

RICHARD WILSON, *1st Assistant Chief,*
Fire Department, Texas City, Texas.

Power Plant Hit by Lightning

"One night in August, 1923, while I was on watch duty the local electric power house was struck by lightning which set the basement where the transformers were located on fire. One large transformer was a roaring furnace when another fireman and I entered the basement. This fireman grabbed a 1-quart carbon tetrachloride extinguisher that hung on the wall and sprayed the base of the fire, but the flames had gained such headway that it was impossible to extinguish them with this gun, although it knocked down much of the fire. We then used two of our 2½-gallon soda-acid extinguishers to finish the job.

THIRD PRIZE — $2.00

W. H. KELLY, *Secretary,*
Fire Dept., Montgomery, Alabama.

Neon Sign Fires

"We have had trouble with defective wiring on neon signs between the transformer and the sign. Because the 110-volt current is stepped up to 11,000 volts or higher, these transformers present quite a fire hazard.

"I recently handled a fire from this source by using a 1-quart carbon tetrachloride extinguisher while standing on an extension ladder. If we had been without this type of extinguisher we would have been forced to break an expensive plate glass to enter the store and pull the electric switch before putting the fire out with water or soda-acid extinguishers."

HONORABLE MENTION

S. M. BROWNE, *Chief,*
Fire Department, Avon, New York.

WALTER J. SILMSER,
Fire Department, Cornwall, Ontario.

CHARLES W. BALL,
Rescue Hose & Ladder Co.,
Bloomsburg, Pennsylvania.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.
2. Letters are to describe actual experiences where any approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 8th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

What Price Delayed Alarms?

The Three-Fold Fire Alarm Box

"A Box a Block" in congested high value districts; not more than 500 feet to the nearest box in closely built residential districts; convenient to every group of buildings, manufacturing establishments, and institutions in sparsely built districts is generally a safe rule to follow.

DEATH by fire is a frequent occurrence, yet most people prefer to believe it cannot come to them, their near relatives, or friends, but is reserved for others. It is preventable and should be unheard of in public institutions. Yet—officials and taxpayers continue to ignore the responsibility which is legally and morally theirs.

Quick response of firemen and apparatus is vital in Life Hazards. Seconds are important when fire is beyond control. The first five minutes are decisive. In nine cases out of ten, the fire can be stopped and life loss avoided within this time. And the property loss will be insignificant.

Panic is a factor to be recognized. Children trying to escape fire in schools, adults in theatres, hotels, and other scenes of grim tragedies have clogged stairways and exits, and have been trampled, suffocated, and burned to death.

No other body of men can so effectively check panic and inspire confidence as the trained municipal fire fighters. A prompt alarm enables them to function. *Delayed alarms are the greatest contributing factor to the fire loss.*

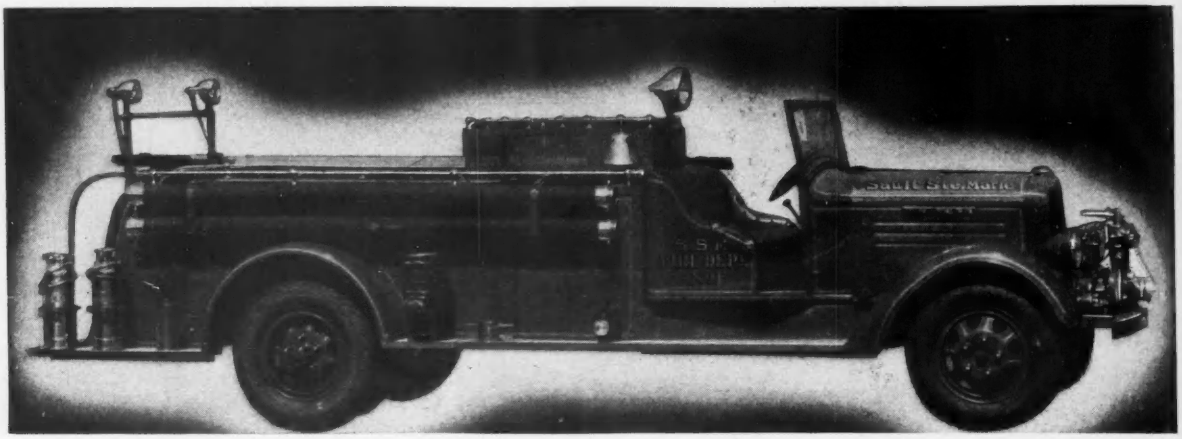
A fire alarm system constantly and automatically supervised, which transmits the alarm instantly and directly to the fire department and at the same time provides for the orderly evacuation of the building, is essential to protection of life and property.

Descriptive Catalogue — Vitaguard Fire Alarm System — Furnished on Request.

THE GAMEWELL COMPANY

NEWTON UPPER FALLS, MASSACHUSETTS

BARTON FIRE PUMPS



CENTRIFUGAL TYPE - - - - FRONT-MOUNTED

Marvelous Performance at LOW COST!

Barton Fire Pumps are recognized the world over as the best and most economical answer to the majority of fire protection problems.

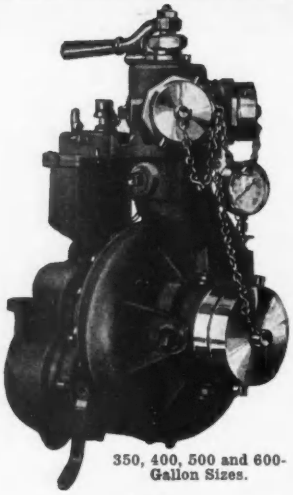
Unlike rotary and piston types, a modern Barton Centrifugal Pump has NO PARTS SUBJECT TO DAMAGE OR EXCESSIVE WEAR when pumping the dirtiest water.

Thus with a Barton you are not limited to pumping from city hydrants. In fact, every day Barton Pumps—automatically primed—are called upon to fight country and suburban fires, delivering huge volumes of water at smashing pressures from ponds, cisterns, rivers, etc.

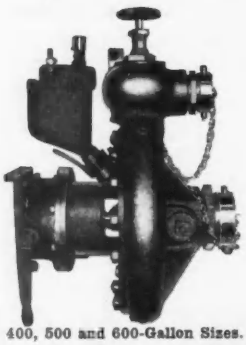
Any Barton Pump can be completely installed on a standard truck WITHOUT A SINGLE CHASSIS CHANGE. A good mechanic can do the entire mounting job in a few hours—entire expense but a few dollars.

New Edition (No. 4) of Bulletin 75 Contains Valuable Fire Stream Data

Write for your copy today! Learn about these wonderful Barton Pumps—how you can effect BIG SAVINGS and still have the finest pumping equipment. And, besides, our copyrighted Fire Stream Data will be found very useful.



350, 400, 500 and 600-Gallon Sizes.



400, 500 and 600-Gallon Sizes.

U-TYPE PUMPS

with Built-in-Gear-Drive for High Pressures at LOW Motor Speeds

This is the Barton DeLuxe Line —"World's Finest Front-Mounted Fire Pumps." All sizes Underwriters' tested. All ratings based on pumping from suction. When pumping from hydrant, every size delivers far in excess of its rating. Built-in Gear-Drive means that truck motor operates at approximately one-half pump speed. With a U-Type Barton Pump wide open, THE MOTOR LOAFS ALONG UNDER NO STRAIN.

F-TYPE PUMPS

with Direct-Drive

These three Barton Fire Pumps—also Underwriters' tested — have every feature offered by the U-Type Pumps, except the Gear-Drive. They are Direct-Drive Pumps, operating at direct motor speeds. This construction makes for lower cost. In fact, for the capacities they deliver, the F-type Pumps sell at the very lowest prices on record.

And we also build smaller fire pumps for booster service at even lower prices—ask us about them!

AMERICAN STEAM PUMP COMPANY

BATTLE CREEK, MICHIGAN . . *PUMPS AND PUMPS ONLY SINCE 1873*

PRINTED IN U. S. A.

V
4
4
A
R
R
3
XU